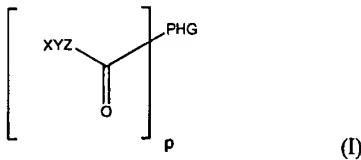


AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-60. (Canceled)

61. (Currently Amended) A lipid compound of formula (I):



wherein

PHG is a polar head group derived from a phospholipid, a lysophospholipid, a ceramide, a monoacylglycerol, a diacylglycerol, or a triacylglycerol, ~~or W-Linker-HG~~;

p is from 1 to 3;

X is independently selected chosen from a $\text{C}_6\text{-}\text{C}_{24}$ alkenyl containing one or more double bonds and optionally one or more triple bonds, a $\text{C}_6\text{-}\text{C}_{24}$ alkynyl containing one or more triple bonds, or and a $\text{C}_6\text{-}\text{C}_{24}$ alkyl, all optionally substituted with at least one of F , hydroxy, $\text{C}_1\text{-}\text{C}_4$ alkoxy, $\text{C}_1\text{-}\text{C}_4$ alkylthio, $\text{C}_2\text{-}\text{C}_5$ acyloxy, and $\text{C}_1\text{-}\text{C}_4$ alkyl;

Y is selected chosen from at least one of S , Se , SO_2 , SO , $[\text{O}]$ and CH_2 ; and

Z is a $\text{C}_1\text{-}\text{C}_{10}$ alkyl group,

wherein each X , Y , and Z is selected chosen independently of each other when p is 2 or 3, and

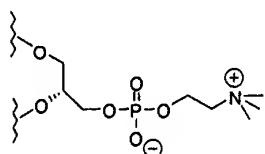
wherein Z is a $\text{C}_1\text{-}\text{C}_6$ alkyl group when X is S and PHG is a phosphatidylethanolamine phospholipid or phosphatidylethanolamine lysophospholipid,

with the proviso that at least one Y is not CH₂.

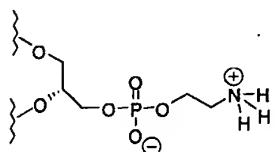
62. (Currently Amended) The lipid compound according to claim 61, wherein the polar head group is derived from a phospholipid selected chosen from the group consisting of phosphatidylserine (PS), phosphatidylcholine (PC), phosphatidylethanolamine (PE), phosphatidylinositol (PI), phosphatidylglycerol (PG), and phosphatidic acid (PA).

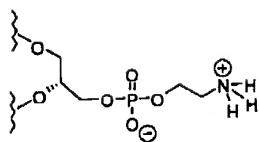
63. (Previously Presented) The lipid compound according to claim 62, wherein p is 1 or 2.

64. (Currently Amended) The lipid compound according to claim 62, wherein p = 2 and the polar head group is selected chosen from the group consisting of formula (II) to (VI):

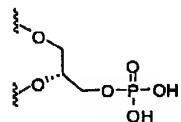


(II)

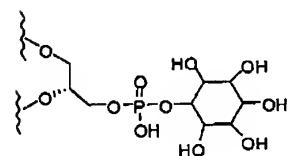




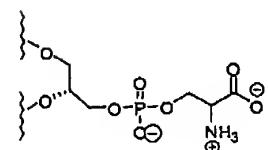
(III)



(IV)



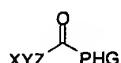
(V) and



(VI).

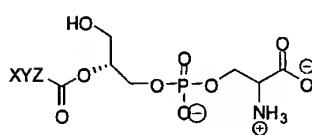
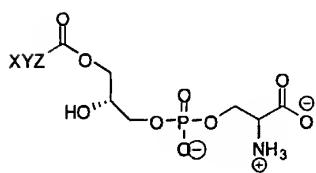
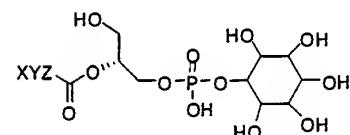
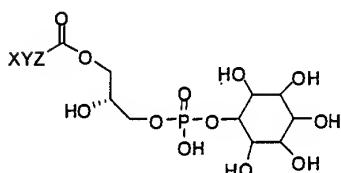
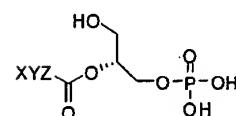
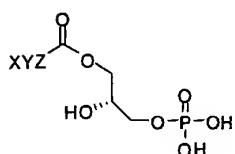
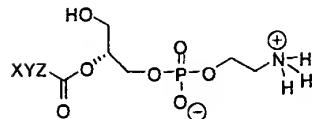
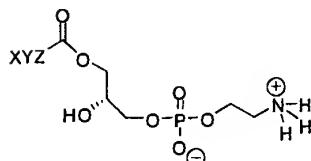
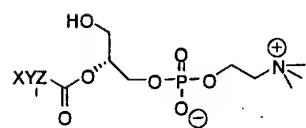
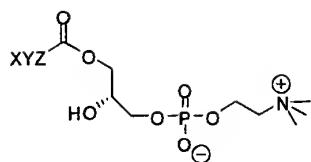
65. (Currently Amended) The lipid compound according to claim 62, wherein

$p = 1$, and is represented by the following formula



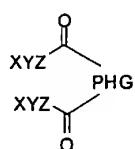
66. (Currently Amended) The lipid compound according to claim 65, wherein

the compound is selected chosen from the group consisting of:



and

67. (Previously Presented) The lipid compound according to claim 63, represented by the following formula:



Claims 68-70. (Canceled)

71. (Currently Amended) The lipid compound according to claim 62, wherein X is independently selected chosen from a C₆-C₂₄ alkynyl containing one or more triple bonds, wherein at least one triple bond is distanced from the terminal end of the acetylenic hydrocarbyl group by 2, 3, or 7 carbons.

72. (Previously Presented) The lipid compound according to claim 71, wherein one triple bond is distanced from the terminal end of the acetylenic hydrocarbyl group by 2 carbons.

73. (Currently Amended) The lipid compound according to claim 62, wherein X is independently selected chosen from a C₁₀-C₁₈ alkynyl containing one or more triple bonds, wherein at least one triple bond is distanced from the terminal end of the acetylenic hydrocarbyl group by 2 carbons.

74. (Currently Amended) The lipid compound according to claim 62, wherein X is independently selected chosen from a C₆-C₂₄ alkenyl containing one or more double bonds.

75. (Currently Amended) The lipid compound according to claim 62, wherein X is independently selected chosen from an unsubstituted C₁₀-C₁₈ alkenyl.

76. (Currently Amended) The lipid compound according to claim 74, wherein at least one double bond is in a *cis* configuration.

77. (Currently Amended) The lipid compound according to claim 74, wherein at least one double bond is in the Δ9 position.

78. (Currently Amended) The lipid compound according to claim 62, wherein X is independently selected chosen from a C₆-C₂₄ alkyl.

79. (Currently Amended) The lipid compound according to claim 78, wherein X is independently selected chosen from a C₁₀-C₁₈ alkyl.

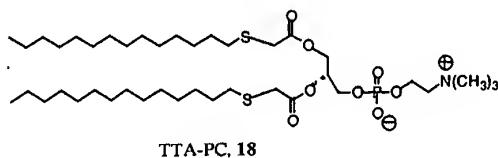
80. (Currently amended) The lipid compound according to claim 62, wherein at least one Y is Se[[,]] or S-er-O.

81. (Previously Presented) The lipid compound according to claim 80, wherein at least one Y is S.

82. (Previously Presented) The lipid compound according to claim 62, wherein Z is -(CH₂)_n- and n is 1 or 3.

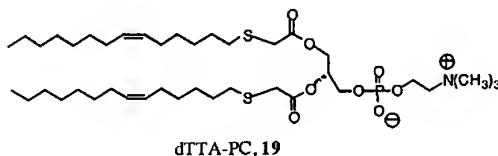
83. (Currently Amended) The lipid compound according to claim 62, wherein said the compound is selected chosen from the group consisting of lipid compounds 18-23:

(18)



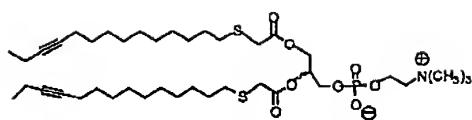
TTA-PC, 18

(19)



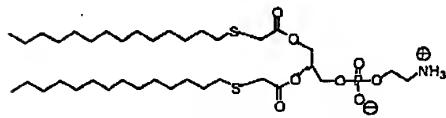
dTTA-PC, 19

(20)



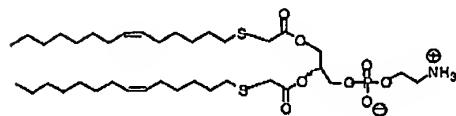
rTTA-PC, 20

(21)



TTA-PE, 21

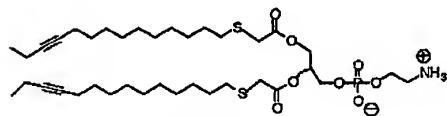
(22)



dTTA-PE, 22

and

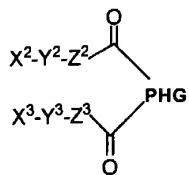
(23)



rTTA-PE, 23

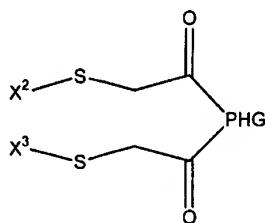
84. (Currently Amended) The lipid compound according to claim 62,

represented by the following formula:



wherein X^2 and X^3 are independently selected chosen from the group consisting of a substituted or unsubstituted, C_{10} - C_{18} alkyl, C_{10} - C_{18} alkenyl, and C_{10} - C_{18} alkynyl; Y^2 and Y^3 are independently selected chosen from S, Se, [[O]] and CH_2 ; Z^2 and Z^3 are independently selected chosen from a C_1 - C_6 alkyl group; with the proviso that at least one Y is not CH_2 .

85. (Currently Amended) The lipid compound according to claim 62, wherein the compound is of formula

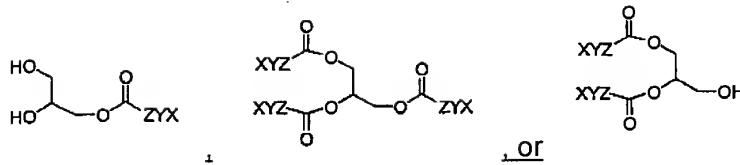


wherein X^2 and X^3 are independently selected chosen from the group consisting of an unsubstituted C_{10} - C_{18} alkyl, an unsubstituted C_{10} - C_{18} alkenyl, and an unsubstituted C_{10} - C_{18} alkynyl.

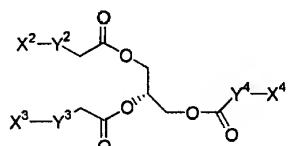
86. (Currently Amended) The lipid compound according to claim 62, wherein the polar head group is derived from the head group of a phosphatidylcholine (PC) or a phosphatidylethanolamine (PE).

87. (Currently Amended) The lipid compound according to claim 61, wherein the polar head group (PHG) is derived from a monoacylglycerol, a diacylglycerol, or a triacylglycerol.

88. (Currently Amended) The lipid compound according to claim 87, represented by one of the following formulas:



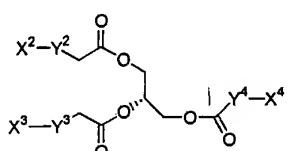
89. (Currently Amended) The lipid compound according to claim 86, wherein the compound is of the formula



wherein

Y^2 , Y^3 , and Y^4 are independently chosen from S, Se, $[[O]]$ and CH_2 ; and
 X^2 , X^3 , and X^4 are independently selected chosen from $[[.]]$ a substituted or unsubstituted $[[.]]$ C_6-C_{24} alkyl, C_6-C_{24} alkenyl, and C_6-C_{24} alkynyl, with the proviso that at least one Y is not CH_2 .

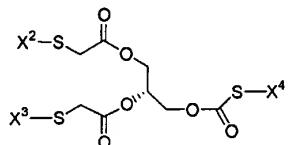
90. (Currently Amended) The lipid compound according to claim 87, wherein the compound is of the formula



wherein

Y^2 , Y^3 , and Y^4 are independently chosen S, Se, $[[O]]$ and CH_2 ; and
 X^2 , X^3 , and X^4 are independently selected chosen from $[[.]]$ a substituted or unsubstituted $[[.]]$ $C_{10}-C_{18}$ alkyl, $C_{10}-C_{18}$ alkenyl, and $C_{10}-C_{18}$ alkynyl, with the proviso that at least one Y is not CH_2 .

91. (Currently Amended) The lipid compound according to claim 87, wherein the compound is of the formula:



wherein

X^2 , X^3 , and X^4 are independently selected chosen from a C_{10} - C_{18} alkyl, a C_{10} - C_{18} alkenyl, and a C_{10} - C_{18} alkynyl.

92. (Currently Amended) The lipid compound according to claim 87, wherein X^2 , X^3 , and X^4 are independently selected chosen from a C_6 - C_{24} alkynyl containing one or more triple bonds, wherein at least one triple bond is distanced from the terminal end of the acetylenic hydrocarbyl group by 2, 3 or 7 carbons.

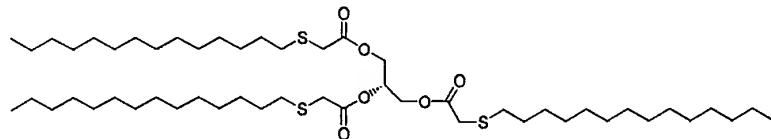
93. (Currently Amended) The lipid compound according to claim 87, wherein X^2 , X^3 , and X^4 are independently selected chosen from C_{10} - C_{18} alkynyl containing one or more triple bonds, wherein at least one triple bond is distanced from the terminal end of the acetylenic hydrocarbyl group by 2 carbons.

94. (Currently Amended) The lipid compound according to claim 87, wherein X^2 , X^3 , and X^4 are independently selected chosen from C_6 - C_{24} alkenyl containing one or more double bonds.

95. (Currently Amended) The lipid compound according to claim 87, wherein X^2 , X^3 , and X^4 are independently selected chosen from an unsubstituted C_{10} - C_{18} alkenyl, wherein at least one double bond is placed in position 3 counted from the omega end.

96. (Currently Amended) The lipid compound according to claim 87, wherein at least one double bond is in a *cis* configuration.

97. (Currently Amended) The lipid compound according to claim 87, wherein the compound is represented by compound 24:



24

98. (Previously Presented) A combination comprising a liposome and a compound according to claim 61.

99. (Previously Presented) A method for the production of a lipid compound according to claim 61.

100. (Previously Presented) A cosmetic formulation comprising a lipid compound according to claim 61.

101. (Previously Presented) A pharmaceutical composition comprising a compound according to claim 61.

102. (Current Amended) A method of treating or preventing a condition selected chosen from syndrome X, obesity or an overweight condition, hypertension, fatty liver, diabetes, hyperglycaemia, hyperinsulinemia, insulin resistance, hyperlipidemia, hypercholesterolemia, hypertriglyceridemia (HTG), and stenosis, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.

103. (Previously Presented) The method according to claim 102, for producing weight loss or a reduction of fat mass, or for preventing weight gain in a human or non-

human animal in need thereof, comprising administering thereto an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.

104. (Previously Presented) A method for the prevention or treatment of inflammatory disorders, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.

105. (Previously Presented) A method of lowering concentration of cholesterol and triglycerides in the blood of mammals and/or inhibiting the oxidative modification of low density lipoprotein, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.

106. (Previously Presented) A method for producing weight loss or a reduction of the fat mass in a human or non-human animal in need thereof, comprising administering thereto an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.

107. (Previously Presented) A method for the modification of the fat distribution and content of animals, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.

108. (Previously Presented) A method of inhibiting or preventing the growth of tumours, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.

109. (Previously Presented) A method for the treatment or inhibition of primary and secondary metastatic neoplasms, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.

110. (Previously Presented) A method for the prevention or treatment of proliferative skin disorders, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.

111. (Previously Presented) A method for the inhibition of proliferation or induction of differentiation of keratinocytes, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.

112. (Previously Presented) A method for the prevention or treatment of inflammatory disorders, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.

113. (Previously Presented) A method for enhancing the endogenous production of interleukin-10 (IL-10) in mammalian cells or tissues, comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.

114. (Previously Presented) A method for suppression of the endogenous production of interleukin-2 (IL-2) in mammalian cells or tissues, comprising

administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.

115. (Previously Presented) A method for the inhibition of proliferation of stimulated peripheral mononuclear cells (PBMC), comprising administering to a subject in need thereof an effective amount of a compound according to claim 61 or a pharmaceutically acceptable salt thereof.

116. (Currently Amended) The pharmaceutical composition according to claim 101, admixed with at least one of a pharmaceutically acceptable carrier, diluent, excipient, or adjuvant.

117. (Previously Presented) A topically administrable pharmaceutical composition according to claim 116.

118. (Previously Presented) A parenterally administrable pharmaceutical composition according to claim 116.

119. (Previously Presented) An intravenously administrable pharmaceutical composition according to claim 116.